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EXAMINER
OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
1723	

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,507	HUXTABLE ET AL.	
	Examiner	Art Unit	
	Marianne S. Ocampo	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8 – 14, 20 – 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. (EP 914,900 A1).

3. With respect to claim 1, the transitional phrase used in this claim namely, "including" has been considered to convey the same *open meaning* as the conventionally transitional phrase "comprising". Bailey et al. disclose a water purifying unit (10) including a head (14, 44, 42) having a first and a second chamber (defined by manifolds 46 & 48 and members 44 & 42), an inlet port (18), an outlet port (20) and a transfer port (conduits located next to the filter indicator 300) between the first and second chambers, each of the first and second chambers being arranged so that a sump (body (90 or 190) of each filter cartridge 38 or 40) can be removably secured thereto, a diverter (48 or 46) mounted within each of the first and second chambers, the diverter dividing its respective chamber into an inlet zone and an outlet zone and each diverter

further being arranged so that a purifying cartridge (38 or 40) can be attached thereto and located within the associated sump (90 or 190) and wherein the head (14) is arranged so that water can enter the head, pass into the inlet zone of the first chamber, through the associated cartridge and into the outlet zone of the first chamber, through the transfer port located in the head, into the inlet zone of the second chamber, through the associated purifying cartridge into the outlet zone of the second chamber and out through the outlet port of the head, as in figs. 3 – 8b and cols. 3 – 10.

4. Regarding claim 8, the limitation "the inner wall" in line 1, lacks proper antecedent basis in this claim. Bailey et al. also disclose an inner wall of each chamber and the associated diverter (46 or 48) including means for proper positioning of the diverter in the associated chamber during assembly of the unit, as in figs. 3 – 5.

5. Concerning claim 9, Bailey et al. disclose the positioning means (i.e. "means for proper positioning" mentioned in claim 8) including a complimentary indentation and protrusion, as in figs. 4 – 5.

6. With regards to claim 10, Bailey et al. further disclose an inner wall of each chamber and its associated diverter being configured so that when they are assembled together they define therebetween the inlet zone (72) and outlet zone (74), as in figs. 4 – 5.

7. Concerning claim 11, Bailey et al. disclose the diverter (46 or 48) and cartridge (38 or 40, respectively) having complimentary bayonet type fitting means to enable the cartridge (38 or 40) to be secured to the diverter (46 or 48), as in figs. 4 – 7.

8. With respect to claim 12, Bailey et al. also disclose the diverter (48, 41 or 46, 39) including a centrally located bayonet aperture (bounded by members 41 or 39) and the cartridge (40 or 38) including a bayonet fitting (defined by locking lugs 80) at an upper end thereof, as in figs. 4 – 7.

9. Regarding claim 13, Bailey et al. disclose the bayonet fitting of the cartridge (38 or 40) is arranged to pass through the bayonet aperture whereafter the cartridge can be rotated to positively locate the bayonet fitting within the diverter, as in figs. 4 – 7.

10. With regards to claim 14, Bailey et al. disclose a seal (O- rings, 51) being provided between the diverter and the upper ends of the cartridges to prevent water leakage therebetween, as in figs. 6 – 7.

11. Concerning claim 20, Bailey et al. further disclose the sump (90 or 190) being configured so that a cartridge (38 or 40) can be secured to the respective diverter and then the sump connected to the head (14) about the cartridge, as in figs. 3 – 8b.

12. With respect to claim 21, in this claim, the limitation "sufficient clearance" is deemed to be an indefinite term. It is unclear what amount of clearance is considered by the applicant to be sufficient. The examiner has considered this term to include any (amount of) clearances between the sump (filter body) and outer periphery of filter element/cartridge which allows flow to pass therethrough and into the cartridge/element being sufficient. In addition, the terms "the inner wall of the sump" and " the outer surface of the cartridge" lack proper antecedent basis in this claim. Bailey et al. disclose sufficient clearance being provided between an inner wall of the sump (90 or 190) and an outer surface of the cartridge (38, 100 or 40, 200) to enable water flow into the sump and through the cartridge, as in figs. 8a – 8b.

13. Regarding claim 22, Bailey et al. disclose the cartridge (38 or 40) including an upper end cap (76 or 178), a lower end cap (92 or 192), a fluid pathway and a filter member (94, 100 or 194, 200), as in figs. 8a – 8b.

14. With regards to claim 26, Bailey et al. also disclose the unit (10) including a decorative cover (12) arranged to fit on the head (14) to provide an improved aesthetic appearance to the unit, as in figs. 1 – 2.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al

17. With respect to claim 7, Bailey et al. further disclose the diverter (48 or 46) being shaped so that it can be pressed into its respective chamber and adhered (fixed) thereto by any suitable means including fasteners, as in col. 5, lines 27 - 56. Although Bailey et al. do not disclose the suitable means for fixing/attaching the diverter (46 or 48) is using an appropriate adhesive, it is considered obvious to one of ordinary skill in the art that depending upon the choice of the user/manufacturer of the unit, costs of manufacture, as well as whether the manufacturer/user wish the (attachment/fixing) design to be permanent or removable, in order to replace the diverter if ever become damaged, that the suitable means for fixing or attaching the diverter to its respective chamber could be that of a suitable adhesive or use of fasteners, respectively. If costs of additional adhesive is not a concern and the user wanted a compact design without worrying about replacing the diverter after several uses, then, a more permanent

fixing or attachment means such as using an appropriate adhesive to fix the diverter to its respective chamber would be the desirable choice. Claim 7 is a product by process claim. The patentability of a product by process claim is based upon the product itself, eventhough the claim is limited and defined by process (i.e. using an appropriate adhesive to adhere the diverter to its chamber), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. *See **In re Thorpe**, et al., No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966.* In this instance, having the diverter of Bailey et al. being fixed or adhered to its respective chamber by a fastener (such as screw bolts) instead of using an adhesive is simply a matter of choice, and also provides at least an obvious variant of the claimed invention, if not the same end product (i.e. having the diverter being fixed to the head).

18. Claims 2, 4, 15 and 17 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Burrows (US 5,045,197).

19. Regarding claim 2, Bailey et al. fail to disclose the head being molded as a single unit from a plastics material. Burrows teach a similar water purifying unit to that of Bailey et al., the unit of Burrows including a head (header manifold 12) being molded as a single unit (instead of two separate parts (44 & 42) as in Bailey et al.) from a plastic(s) material, as in fig.1 and in cols. 2 – 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the head of the water purifying unit of Bailey et al. by adding the embodiment taught

by Burrows, in order to provide an improved design for the head, which is more economical to manufacture (see col. 4, lines 66 – 68 of Burrows) and would need less time for assembly and disassembly of the unit when cartridges need to be replaced. It is also known that parts made of plastic, compared to its metallic or glass counterparts, have longer life or more durable because of its corrosion resistance and physical stability (i.e. wont easily break or damaged).

20. With regards to claim 4, Bailey et al. fail to disclose the transfer port and the outlet port being formed in the head by a single post molding drilling operation. Burrows also teach the head (12) including a transfer port (90) and an outlet port (93) formed therein by a single post molding drilling (with a core pin 94) operation, as in figs. 4 & 8 and in cols. 5 – 8. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the unit of Bailey et al. by adding the embodiment of Burrows, in order to provide an improved design for the head which provides a single structure which is compact for a simpler integrated purifying unit assembly (see col. 9, lines 11 – 23). Claim 4 is a product by process claim. The patentability of a product by process claim is based upon the product itself, eventhough the claim is limited and defined by process (i.e. forming of the transfer port and outlet port by a single post molding drilling operation), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. *See **In re Thorpe**, et al., No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966.* In this instance, once all the parts of the head has been assembled and formed a as a unitary/integrated unit as in Bailey et al., it is considered at least an obvious variant of the

claimed invention in which the end product would be a head with a transfer port and an outlet port therein.

21. Concerning claim 15, Burrows also teaches the unit including a sump (filter housing/body 38 or 40 or 42) being removably secured to the head (12), wherein the sump (38 or 40 or 42) is being molded from a (light-weight) plastics material, as in figs. 1 & 4 and in col. 5, lines 8 – 10. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the material of construction of the sump of the unit of Bailey et al., to a (light-weight) plastics material as taught by Burrows, in order to provide an improved material of construction which compared to its metallic or glass counterparts, have longer life or more durable because of its corrosion resistance and physical stability (i.e. wont easily break or damaged).

22. With respect to claims 17 - 19, in this claim, the term "the upper inner wall" lacks proper antecedent basis. Burrows further teaches each sump (38, 40, 42) being arranged to be attached to the head (12) by a threaded connection (claim 17), wherein an upper inner wall of the sump (38, 40, 42) including a screw thread (internal threads) arranged to threadedly engage with a complimentary (external threads) on a lower end portion of a chamber (formed in the head 12) to which the sump (38, 40, 42) is to be secured (claim 18), and a seal (rings 48) being provided between the lower end of each chamber (formed by the head 12) and the associated sump (38, 40, 42) to prevent water leakage (claim 19), as in fig. 4 and in col. 5. It is considered obvious to

one of ordinary skill in the art at the time of the invention to modify the connection between the head and the sump of the unit of Bailey et al., by adding the embodiment taught by Burrows, in order to provide an alternative design for the removable connection between the head and the sump which is just as effective and easy to remove/detach from one another.

23. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey and Burrows, as applied to claims 2 and 15 above, and further in view of the article "**Acrylonitrile-Butadiene-Styrene (ABS) Polymers**" (Encyclopedia of Polymer Science and Technology, copywright 2002 by John Wiley & Sons, Inc, article online posting date, October 22,2001, one page) and Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

24. With respect to claims 3 and 16, although Bailey et al. as modified by Burrows, do not teach the type of plastics used to mold the head and the sump, it is considered obvious to one of ordinary skill in the art at the time of the invention to modify/substitute the material of construction of the head and sump of the water purifying unit of Bailey et al., as modified by Burrows, from any plastics material to specifically that of an ABS plastics (otherwise known as Acrylonitrile-Butadiene-Styrene polymers/thermoplastics/resins) for their desirable properties which include excellent toughness, good dimensional stability and good chemical resistance, as in the article, under the heading "Introduction", **Acrylonitrile-Butadiene-Styrene (ABS) Polymers**" (Encyclopedia of Polymer Science and Technology, article online posting date 10-

22-01) and in Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

25. Claims 5 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of the article "**Acrylonitrile-Butadiene-Styrene (ABS) Polymers**" (Encyclopedia of Polymer Science and Technology, copywright 2002 by John Wiley & Sons, Inc, article online posting date, October 22,2001, one page) and Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

26. Concerning claims 5 - 6, Bailey et al. do not disclose the diverter being molded from a plastics material. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the material of construction of the diverter of the unit of Bailey et al., to a plastics material, in particular an ABS plastic, in order to provide an improved material of construction which compared to its metallic or glass counterparts, have longer life or more durable because of its corrosion resistance and physical stability (i.e. wont easily break or damaged) [claim 5], thereby providing an improved and physically stable purifying unit. It is well known in the art that an ABS plastics (otherwise known as Acrylonitrile-Butadiene-Styrene polymers/thermoplastics/resins) is a desirable plastics material for forming a part (i.e. the diverter) because it has excellent properties which include excellent toughness, good dimensional stability and good chemical resistance, as in the article, under the heading "Introduction", **Acrylonitrile-Butadiene-Styrene (ABS) Polymers**" (Encyclopedia of Polymer Science and

Technology, article online posting date 10-22-01) and in Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

27. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Gundrum et al. (US 6,436,282 B1).

26. Concerning claim 25, in this claim, it is unclear if the phrase "such as a side wall of a cupboard" is considered an additional claim limitation. For examination purposes, the examiner has considered this to be not an additional limitation but merely giving an example of where the unit could be attached to. Bailey et al. fail to disclose the unit further including means for enabling the unit to be attached to a surface such as a side wall of a cupboard. Gundrum et al. teach a purifying unit similar to that of Bailey et al., wherein the unit also includes a means for enabling the unit to be attached to a surface, in the form of two brackets having each an aperture therethrough formed in the head portion (21, 22) of the unit, wherein a screw, nail or clip or any type of hooking means on a side wall of a cupboard can be passed through the aperture and hold the unit to the side wall of the cupboard, as in fig. 2. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the purifying unit of Bailey et al., by adding the embodiment taught by Gundrum et al., in order to provide a means for storing and/or mounting the unit to a wall without having the unit occupy more space in a kitchen or faucet counter. With this design, the unit could be used without taking up too much space in a small

kitchen or be installed in an area where the faucet or water source has no available counter space to keep it in a standing position.

27. Claims 23 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Wilhelm (US 3,076,550).

28. Concerning claims 23 - 24, Bailey et al. fail to disclose the lower end cap of the cartridge having at least a pair of protrusions spaced peripherally thereabout and arranged to restrict or prevent side to side movement of a lower end of the cartridge when high water pressure loads are applied to the cartridge (claim 23), wherein the protrusions take the form of triangular shaped wings extending outwardly of the cartridge (claim 24). Wilhelm teaches a filter cartridge (42) disposed within a sump (45) of a purifying unit (10), the cartridge having a lower end cap (43) having at least a pair of protrusions (44) spaced peripherally thereabout and extending outwardly from a lower end of the cartridge (42) and capable of restricting or preventing side to side movement of a lower end of the cartridge (42) when high water pressure loads are applied to the cartridge, as in fig. 1 and col. 2. Although Bailey et al. as modified by Wilhelm do not teach the protrusions having or taking the form of triangular shaped wings (claim 24), it is considered obvious to one of ordinary skill in the art to modify the shape of the protrusions to any suitable or desired shape as a matter of choice of the manufacturer. The case law, ***In re Dailey***, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), provided (The court held) that the configuration/shape of the claimed invention (in this instance, those protrusions at a lower end

cap) was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed invention was significant. Since there is no persuasive evidence found in the specification provided by the applicants regarding the importance or significance of triangular shaped wings for the protrusions, the examiner considered that the protrusions taught by Bailey et al as modified by Wilhelm, are the same or serve the same purpose as those in the claimed invention.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 5,300,223 (Wright), 3,397,786 (Hultgren), 5,833,850 (Liu), 4,713,175 (Bray), 5,078,864 (Whittier), 6,139,741 (McGibbon) and 6,001,249 (Bailey et al.).

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

32. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

M.S.O.
May 12, 2003

W. L. WALKER
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